

imes This portion to be deleted when sidewalk is adjacent to curb or curb and gutter with no buffer strip.

NOTES:

- 1. WHERE THE LONGITUDINAL PERFORATED PIPE ALIGNS WITH A DRAINAGE STRUCTURE (DROP INLET, MANHOLE, ETC.), A NON-PERFORATED OUTLET PIPE IS NOT REQUIRED. INSTEAD, THE PERFORATED PIPE IS TO BE CONNECTED DIRECTLY TO THE DRAINAGE STRUCTURE. WHERE THE LONGITUDINAL PERFORATED PIPE IS CONTINUOUS, IT SHALL BE CONNECTED TO EACH SIDE OF THE DRAINAGE STRUCTURE.
- 2. INVERT ELEVATION AT OUTLET END OF OUTLET PIPE TO BE A MINIMUM OF 1'-0" ABOVE INVERT ELEVATION OF RECEIVING DRAINAGE DITCH OR STRUCTURE.
- 3. ALL CONNECTIONS (ELBOWS, WYES, ETC.) WITHIN PAY LIMITS FOR OUTLET PIPE ARE TO BE OF THE SAME CRUSHING STRENGTH AS THE OUTLET PIPE.
- 4. OUTLET PIPE ARE TO BE INSTALLED ON 2 % MIN. (3 % DESIRABLE) GRADE
- 5. OUTLET PIPE TO BE SECURELY CONNECTED TO EW-12 OR OTHER DRAINAGE STRUCTURE.
- 6. SIDEWALK UNDERDRAIN IS TO BE USED WHEN THE SIDEWALK LONGITUDINAL GRADIENT IS 3% OR MORE AND WHEN THE UNDERLYING SOIL HAS 34% OR MORE PASSING THE NO. 200 SIEVE, AND HAS A PIOF 13 OR LESS, AND THE AREA HAS A HISTORY OF SIDEWALK UNDERMINING.
- 7. SIDEWALK UNDERDRAINS SHOULD BE TIED INTO THE STORM SEWER SYSTEM AT POINTS APPROXIMATLEY A CITY BLOCK APART, UNDERDRAIN RUNS MUST NOT EXCEED 1,000 FEET IN LENGTH WITHOUT DISCHARGING INTO THE STORM DRAIN SYSTEM OR INTO AN OPEN DRAIN.
- 8. WITHIN THE LIMITS OF A COMMERCIAL ENTRANCE, NON-PERFORATED PIPE SHALL BE UTILIZED IN LIEU OF PERFORATED PIPE.

LONGITUDINAL PERFORATED PIPE

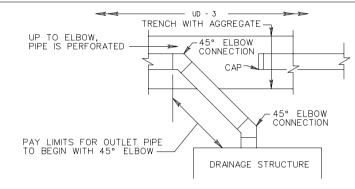
TYPE OF PIPE	CRUSHING STRENGTH		
	× w.⊤.	6" NOMINAL DIAMETER	
SMOOTH WALL PVC	0.153		
CORRUGATED PE		AASHTO M-252	

NON-PERFORATED PIPE FOR USE UNDER COMMERCIAL ENTRANCES AND FOR OUTLETS

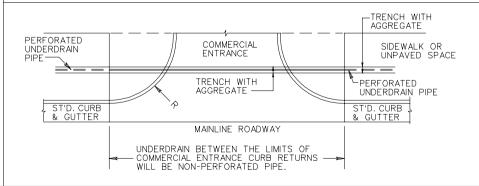
TYPE OF PIPE	CRUSHING STRENGTH		
	× w.⊤.	6" NOMINAL DIAMETER	
SMOOTH WALL PVC	0.153		
SMOOTH WALL PE		70 PSI X X X	

* WALL THICKNESS (MIN) - INCHES

*** TESTED ACCORDING TO ASTM D-2412 AT 5% DEFLECTION.



OUTLET PIPE



SPECIFICATION REFERENCE 232 501

701

STANDARD SIDEWALK UNDERDRAIN

VIRGINIA DEPARTMENT OF TRANSPORTATION

REV. 2/06